

**Table 1:** Validity and reliability values of the three Hammer devices analysed.

|            |       | HAMMER 1 |      |            |      |     |       |              | HAMMER 2 |         |      |            |      |     |       | HAMMER 3     |         |         |      |            |       |     |       |              |         |
|------------|-------|----------|------|------------|------|-----|-------|--------------|----------|---------|------|------------|------|-----|-------|--------------|---------|---------|------|------------|-------|-----|-------|--------------|---------|
|            |       | SRM (W)  |      | Hammer (W) |      | SEM | ICC   | Bland Altman |          | SRM (W) |      | Hammer (W) |      | SEM | ICC   | Bland Altman |         | SRM (W) |      | Hammer (W) |       | SEM | ICC   | Bland Altman |         |
|            |       | Mean SD  | CV   | Mean SD    | CV   |     |       | Bias         | SD Bias  | Mean SD | CV   | Mean SD    | CV   |     |       | Bias         | SD Bias | Mean SD | CV   | Mean SD    | CV    |     |       | Bias         | SD Bias |
| 70 CAD     | 100 W | 94±5     | 5.0% | 100±1*     | 1.4% | 1.4 | 0.999 | 3.5          | 3.6      | 101±3   | 3.3% | 101±1      | 0.5% | 1.0 | 0.999 | -2.9         | 2.9     | 102±5   | 4.4% | 101±1      | 1.0%  | 1.4 | 0.999 | -2.8         | 3.0     |
|            | 150 W | 143±3    | 2.3% | 150±1*     | 0.5% | 1.0 |       |              |          | 153±4   | 2.3% | 150±1      | 0.5% | 1.0 |       |              |         | 152±4   | 2.5% | 151±1      | 0.6%  | 1.1 |       |              |         |
|            | 200 W | 196±4    | 1.8% | 200±1*     | 0.7% | 1.1 |       |              |          | 202±3   | 1.7% | 201±1      | 0.3% | 1.0 |       |              |         | 203±4   | 2.1% | 201±2      | 0.8%  | 1.3 |       |              |         |
|            | 250 W | 243±3    | 1.3% | 251±1      | 0.5% | 1.0 |       |              |          | 253±3   | 1.4% | 251±1      | 0.3% | 1.0 |       |              |         | 254±5   | 1.8% | 251±2      | 0.6%  | 1.4 |       |              |         |
|            | 300 W | 299±4    | 1.3% | 301±1      | 0.3% | 1.1 |       |              |          | 304±4   | 1.2% | 300±1      | 0.3% | 1.1 |       |              |         | 305±4   | 1.3% | 301±2      | 0.6%  | 1.2 |       |              |         |
|            | 350 W | 352±4    | 1.1% | 350±2      | 0.5% | 1.2 |       |              |          | 358±4   | 0.7% | 350±1*     | 0.3% | 0.8 |       |              |         | 357±4*  | 1.1% | 351±2*     | 0.4%  | 1.2 |       |              |         |
| 85 CAD     | 100 W | 95±5     | 4.9% | 101±1*     | 0.9% | 1.4 | 0.999 | 3.8          | 3.7      | 104±2   | 2.1% | 101±1      | 0.9% | 0.7 | 0.999 | -4.1         | 2.5     | 104±5   | 4.7% | 101±1      | 0.7%  | 1.5 | 0.999 | -2.9         | 3.4     |
|            | 150 W | 143±4    | 3.0% | 151±1*     | 0.7% | 1.3 |       |              |          | 153±3   | 1.9% | 150±1      | 0.4% | 0.9 |       |              |         | 151±5   | 3.3% | 151±1      | 0.7%  | 1.5 |       |              |         |
|            | 200 W | 196±3    | 1.7% | 200±1*     | 0.4% | 1.0 |       |              |          | 205±3   | 1.4% | 201±1      | 0.3% | 0.9 |       |              |         | 203±5   | 2.6% | 201±1      | 0.6%  | 1.6 |       |              |         |
|            | 250 W | 247±4    | 1.5% | 250±1      | 0.3% | 1.1 |       |              |          | 254±3   | 1.1% | 251±1      | 0.2% | 0.8 |       |              |         | 254±4   | 1.7% | 252±2      | 0.7%  | 1.3 |       |              |         |
|            | 300 W | 298±4    | 1.3% | 301±1      | 0.2% | 1.2 |       |              |          | 306±3   | 0.8% | 301±1*     | 0.4% | 0.8 |       |              |         | 306±5   | 1.7% | 302±2      | 0.7%  | 1.6 |       |              |         |
|            | 350 W | 350±5    | 1.3% | 350±2      | 0.6% | 1.3 |       |              |          | 357±3   | 0.9% | 350±1*     | 0.1% | 0.9 |       |              |         | 357±5*  | 1.4% | 353±2*     | 0.6%  | 1.6 |       |              |         |
| 100 CAD    | 100 W | 88±8     | 9.5% | 101±1*     | 1.0% | 2.5 | 0.998 | 9.6          | 6.6      | 101±4   | 3.6% | 101±1      | 1.1% | 1.1 | 0.999 | -1.6         | 2.6     | 99±5    | 4.6% | 101±1      | 0.52% | 1.4 | 0.998 | -0.4         | 3.2     |
|            | 150 W | 139±7    | 5.0% | 151±2*     | 1.2% | 2.1 |       |              |          | 150±4   | 2.4% | 150±1      | 0.8% | 1.1 |       |              |         | 148±5   | 3.2% | 151±1      | 0.51% | 1.4 |       |              |         |
|            | 200 W | 189±7    | 3.6% | 201±2*     | 0.8% | 2.0 |       |              |          | 203±4   | 2.0% | 201±2      | 0.8% | 1.2 |       |              |         | 200±5   | 2.6% | 200±1      | 0.45% | 1.5 |       |              |         |
|            | 250 W | 241±6    | 2.5% | 250±1*     | 0.5% | 1.8 |       |              |          | 253±4   | 1.6% | 251±1      | 0.4% | 1.3 |       |              |         | 251±5   | 2.2% | 251±1      | 0.51% | 1.6 |       |              |         |
|            | 300 W | 292±7    | 2.2% | 300±1      | 0.2% | 2.0 |       |              |          | 302±4   | 1.4% | 300±1      | 0.3% | 1.2 |       |              |         | 302±5   | 1.8% | 302±2      | 0.69% | 1.6 |       |              |         |
|            | 350 W | 347±3    | 0.8% | 350±2      | 0.4% | 0.8 |       |              |          | 355±4   | 1.1% | 350±2      | 0.4% | 1.2 |       |              |         | 355±4   | 1.2% | 352±2      | 0.63% | 1.3 |       |              |         |
| 250 w FC-S |       | 248±7    | 2.8% | 249±1      | 0.6% | 2.1 | 0.996 | 0.1          | 5.3      | 256±7   | 2.6% | 249±2      | 0.7% | 2.0 | 0.996 | -5.5         | 3.6     | 253±4   | 1.6% | 251±2      | 0.7%  | 1.3 | 0.997 | -3.2         | 4.3     |
| 350 w FC-S |       | 350±7    | 2.1% | 350±2      | 0.6% | 2.2 |       |              |          | 353±4   | 1.6% | 352±2      | 0.6% | 1.7 |       |              |         | 354±6   | 1.8% | 352±2      | 0.4%  | 1.9 |       |              |         |
| 450 w FC-S |       | 452±8    | 1.8% | 450±3      | 0.6% | 2.4 |       |              |          | 456±9   | 2.1% | 449±2      | 0.5% | 2.8 |       |              |         | 455±6   | 1.3% | 450±1      | 0.2%  | 1.7 |       |              |         |
| 500 w FC   |       | 492±9    | 1.9% | 496±5      | 1.0% | 2.8 |       |              |          | 504±7   | 1.3% | 499±3      | 0.7% | 2.0 |       |              |         | 501±7   | 1.4% | 499±2      | 0.4%  | 2.2 |       |              |         |

CAD = Cadence; FC-S = Free cadence standing; SD = Standard Deviation; CV = Coefficient of variation; SEM = Standard error of the mean; ICC = Intraclass correlation coefficient; LoA = 95% Limits of Agreement; \* Significant differences compared to the SRM device (p < 0,05).